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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,668	01/10/2002	Isamu Ohshita	Q67887	2949
7590 03/18/2005			EXAMINER	
SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, NW Washington, DC 20037-3213			ROY, SIKHA	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,668

Applicant(s)

OHSHITA ET AL.

Examiner

Sikha Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The Amendment, filed on March 1, 2005 has been entered and is acknowledged by the Examiner.

Cancellation of claims 12 has been entered.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

Claim 17 is objected to because of the following informalities:

Claim 17 lines 1,2 'mask supporting layers is disposed' should be replaced with 'mask supporting layers are disposed' for grammatical correction.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,7-9, 14,16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,768,257 to Yamada et al.

Regarding claim 1 Yamada discloses (Figs. 3C, 4,5,6 column 5 lines 34-50,66,67, column 6 lines 8-346, column 7 lines 30-38) an organic EL device comprising a plurality of ITO films (lower electrode) 10 disposed on transparent substrate via an interlayer insulating film 7, a first insulating film 13 which is disposed between adjacent ones of the ITO films 10, organic EL thin film deposited 11R, 11G and 11B deposited on ITO films, a cathode film (upper electrode) 12 deposited on the ITO films and plurality of insulative mask supporting layers (rib)14 constituting a part of the first insulating film 13, the mask supporting layers (serving as spacers for mask used when evaporating organic layers) preventing metal mask 20 used in formation of organic EL thin film and cathode film from being in contact with the pixel portion of the transparent substrate.

Regarding claim 2 Yamada discloses in Fig. 3C that the display uses TFT substrate in which ITO films and TFT layers are disposed via interlayer insulating film 7, connected to one another in an active matrix system.

Regarding claim 3 Yamada discloses (column 6 lines 22-25) the mask supporting layers 14a are formed of resist.

Regarding claim 7 Yamada discloses (Fig. 4) all the limitations same as of claim 1 and additionally the plurality of insulative mask supporting layer (ribs) 14 disposed on part of the first insulating film 13.

Regarding claim 8 Yamada discloses (column 6 lines 8-25 Fig. 4) the insulative mask supporting layers 14 and the first insulating layer 13 are formed from silicon oxide.

Referring to claim 9 Yamada discloses the insulative mask supporting layers are formed on the first insulating layer.

Regarding claim 14 Yamada discloses (column 7 lines 33-37) the insulative mask supporting layers have taper-shaped side walls.

Claim 16 essentially recites the same limitation as of claim 9 and hence is rejected for the same reason.

Regarding claim 17 it is clearly evident from Figs. 5A-5C of Yamada that the insulative mask supporting layers 14 are disposed such that a predetermined gap is maintained between corresponding one of the ITO film 10 and metal mask 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 10, 11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,768,257 to Yamada et al.

Regarding claim 4, Yamada discloses the claimed invention except for the limitation of the insulative mask supporting layers having a reverse tapered shape. It has been held that a change in shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, USPQ 47 (CCPA 1966). It would have been obvious to one having ordinary skill in the art to modify the shape of the insulative bank layers of Yamada in a reversed tapered configuration, since such a modification would have involved a mere change in the shape of a component.

Regarding claims 10 and 11 Yamada discloses the claimed invention except for the limitation of the insulative mask supporting layers are stripe (claim 10) and island (claim 11) shaped. It is noted that applicant's specific stripe or island shape of the mask supporting layers does not solve any of the stated problems or yield any unexpected results. Thus one of ordinary skill in the art would consider the stripe or island shape of the insulating mask supporting layers as an obvious matter of design choice and it appears that the invention would perform equally well with the insulating bank layer of Yudasaka.

Regarding claim 13 Yamada discloses (column 9 lines 54-56) the insulative mask supportive layers have thickness sufficient for functioning as spacer ensured by the insulating material layer. Yamada discloses the claimed invention except for the limitation of thickness of the mask supporting layers of at least 2 μ m. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980). Thus, it would have been obvious to one of ordinary skills in the art at the time the invention was made to have the mask supporting layer of Yamada having thickness of at least 2 μ m, since discovering an optimum value of a result variable is considered within the skills of the art.

Regarding claim 15 Yamada discloses the claimed invention having both of the first insulating layer and mask supporting layer formed of same material of inorganic silicon oxide film. Yamada does not disclose the limitation reciting 'the insulative mask supporting layers constituted by locally thickened portion of the first insulating layer'

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which is the method of forming the mask supporting layer. The examiner notes that the method of forming the device is not germane to the issue of patentability of the device itself and hence this limitation has not been given patentable weight.

Response to Argument

Applicant's arguments with respect to claims 1 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.R.

Sikha Roy
Patent Examiner
Art Unit 2879


JOSEPH WILLIAMS
PRIMARY EXAMINER